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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,457	03/24/2004	Mitsugi Chonan	032405.	2933
441	7590	10/21/2005	EXAMINER	
SMITH, GAMBRELL & RUSSELL, LLP			LE, DAVID D	
1850 M STREET, N.W., SUITE 800			ART UNIT	
WASHINGTON, DC 20036			PAPER NUMBER	

3681

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/807,457

Applicant(s)

CHONAN ET AL.

Examiner

David D. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This is the first Office action on the merits of Application No. 10/807,457, filed on 24 March 2004. Claims 1-4 are pending.

#### **Documents**

2. The following documents have been received and filed as part of the patent application:
  - Foreign Priority Document, received on 03/24/04
  - Information Disclosure Statement, received on 03/24/05
  - Information Disclosure Statement, received on 06/17/04
  - Declaration, received on 06/17/04
  - Power of Attorney, received on 09/15/04

#### ***Specification***

3. The disclosure is objected to because of the following informalities:
  - Page 8, line 9, the “recoil rope 46” should be --recoil rope 45--.
  - Page 13, line 16, “the driving shaft 82” should be --the front wheel driving shaft 82--.
  - Page 13, line 17, “a front wheel driving shaft 85” should be --a driving shaft 85--
  - Page 16, line 10, “leer 6” should be --lever 6--.
  - Page 17, line 26, “bake disk 100” should be --brake disk 100--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

*Claims 1-4:*

- Claim 1, line 4 recites the limitation “an engine”. It is unclear whether this engine is different from the engine, as first recited on line 1 of the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 4,504,247 to Chana et al.**

*Claim 1:*

Chana (i.e., Fig. 2; column 2, line 15 – column 3, line 31) discloses a variable ratio drive system comprising:

- An engine (i.e., column 2, line 28, being the prime mover);

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- A crank shaft (i.e., Fig. 2, element 24) driven by said engine, said crankshaft being arranged in a vehicle body in a widthwise direction of the vehicle body (i.e. Fig. 2);
- A sub-shaft (i.e., Fig. 2, element 18) which is arranged schematically parallel to said crankshaft and to which the rotation of said crankshaft is transmitted via at least a rotary transmission member (i.e., Fig. 2, being clutch 22);
- A belt type continuously variable transmission (i.e., Fig. 2, element 10) including a primary shaft (i.e., Fig. 2, element 16) arranged concentrically with said sub-shaft and provided with a primary pulley (i.e., Fig. 2, element 44) having a variable groove width; and a secondary shaft (i.e., Fig. 2, element 78) provided with a secondary pulley (i.e., Fig. 2, element 94) coupled to said primary pulley via a belt (i.e., Fig. 2, element 96) and having a variable groove width;
- Wherein the rotation of said crankshaft is transmitted to said primary shaft via said sub-shaft arranged parallel to said primary shaft.

8. **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 4,304,150 to Lupo et al.**

Claim 1:

**Lupo** (i.e., Fig. 1; column 4, line 11 – column 7, line 33) discloses a transmission unit comprising:

- An engine (i.e., column 4, lines 15-16);

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- A crank shaft (i.e., Fig. 1, element 16) driven by said engine, said crankshaft being arranged in a vehicle body in a widthwise direction of the vehicle body (i.e. Fig. 1);
- A sub-shaft (i.e., Fig. 1, element 32) which is arranged schematically parallel to said crankshaft and to which the rotation of said crankshaft is transmitted via at least a rotary transmission member (i.e., Fig. 1, element 22);
- A belt type continuously variable transmission (i.e., Fig. 1) including a primary shaft (i.e., Fig. 1, element 30) arranged concentrically with said sub-shaft and provided with a primary pulley (i.e., Fig. 1, element 40) having a variable groove width; and a secondary shaft (i.e., Fig. 1, element 46) provided with a secondary pulley (i.e., Fig. 1, element 44) coupled to said primary pulley via a belt (i.e., Fig. 1, element 42) and having a variable groove width;
- Wherein the rotation of said crankshaft is transmitted to said primary shaft via said sub-shaft arranged parallel to said primary shaft; and
- A friction clutch (i.e., Fig. 1, element 48) arranged between said sub-shaft and said primary shaft.

### *Claim Rejections - 35 USC § 103*

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lupo et al. in view of Chana et al.**

*Claim 2:*

*Lupo* discloses the limitations as set forth in paragraph 8 above. Regarding claim 2, Lupo lacks a centrifugal clutch arranged between said sub-shaft and said primary shaft.

*Chana* (i.e., Fig. 2; column 3, lines 8-20), on the other hand, teaches a variable ratio drive system comprising a centrifugal clutch (i.e., Fig. 2, element 82).

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify Lupo such that the friction clutch (48) is the centrifugal clutch, in view of Chana, in order to simplify the construction of the transmission by eliminating the need of having, i.e., a fluid actuating device to actuate the friction clutch.

***Allowable Subject Matter***

11. Claims 3 and 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Okano et al. (U. S. Patent No. 6,749,530) teaches a belt-type continuously variable transmission as shown in Fig. 1.
- Murakami et al. (U. S. Patent No. 6,902,502) teaches a continuously variable transmission as shown in Fig. 8.
- James E. Rester (U. S. Patent No. 3,630,010) teaches a minibike comprising a recoil starter.
- Fukuda (U. S. Patent Application Publication No. US 2004/0094343) teaches a continuously variable transmission comprising an electric starter and a centrifugal clutch.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ddl



**HAHO**  
**PRIMARY EXAMINER**

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10/18/05